

## PACKAGED VIRUS-LIKE PARTICLES

### ABSTRACT OF THE DISCLOSURE

The present invention is related to the fields of vaccinology, immunology and  
5 medicine. The invention provides compositions and methods for enhancing  
immunological responses against antigens coupled or fused to virus-like particles (VLPs)  
packaged with immunostimulatory nucleic acids, preferably oligonucleotides containing  
at least one non-methylated CpG sequence and a toll-like receptor (TLR) ligand. The  
invention can be used to induce strong antibody and T cell responses particularly useful  
10 for the treatment of allergies, tumors and chronic viral diseases as well as other chronic  
diseases.